

ABSTRACT

An optical transceiver module is disclosed with improved digital diagnostic integrated circuits. The optical transceiver includes an electrical-to-optical transmitter and an optical-to-electrical receiver each coupled to a digital diagnostic integrated circuit. A bi-directional 2-wire control interface is provided and a microcontroller couples the digital diagnostic integrated circuit to the control interface. Various methods are described for using the microcontroller to incorporate changes or diagnostic functions in the digital diagnostic integrated circuit.